Date of Hearing: April 11, 2017

ASSEMBLY COMMITTEE ON HOUSING AND COMMUNITY DEVELOPMENT David Chiu, Chair

AB 1857 (Nazarian) – As Amended April 3, 2018

SUBJECT: Building codes: earthquake safety: immediate occupancy standard

SUMMARY: Requires the California Building Standards Commission (CBSC) to assemble a working group to investigate and, by July 1, 2020, determine criteria for a "functional recovery" standard following a seismic event for all or some building occupancy classifications. The working group shall direct the CBSC and the Department of Housing and Community Development (HCD) to propose the appropriate building standards for consideration by the CBSC during the next regularly scheduled Triennial Adoption Cycle occurring after January 1, 2020. Specifically, **this bill**:

- 1) Requires the CBSC to assemble a functional recovery working group comprised of appropriate public and private sector entities, including, but not limited to:
 - a) HCD;
 - b) The Structural Safety Department of the Division of the State Architect;
 - c) The International Code Council;
 - d) The Structural Engineers Association of California;
 - e) California building officials;
 - f) The insurance industry;
 - g) The Building Owners and Managers Association;
 - h) Members of the construction industry;
 - i) The Earthquake Engineering Research Institute;
 - j) The California Council of the American Institute of Architects;
 - k) The Association of Bay Area Governments;
 - 1) The Southern California Association of Governments:
 - m) The American Society of Civil Engineers; and
 - n) The Los Angeles Economic Development Council or an economic development organization representing a metropolitan region in the state.

- 2) Provides that not later than July 1, 2020, the functional recovery working group shall do both of the following:
 - a) Investigate and determine criteria for a "functional recovery" standard for all or some building occupancy classifications, and investigate and determine practical means of implementing that standard, as mandatory building code provisions. This shall be done for each of the seismic design categories applicable to the state.
 - b) Subsequent to development of the above-referenced building code provisions, the working group shall direct the CBSC and HCD to propose the appropriate building standards for consideration by the CBSC during the next regularly scheduled Triennial Adoption Cycle occurring after January 1, 2020.
- 3) Specifies that if the above-referenced mandatory building code provisions are not completed in time for inclusion with the California Building Standards Code, effective January 1, 2023, the CBSC and HCD shall produce a guidance document for use by architects, building owners, insurance companies, and local jurisdictions that would provide a higher level of structural strength in new construction with the goal of enabling functional recovery after a significant seismic event. Authorizes the CBSC to take the steps necessary to produce and distribute this document to interested parties via its Internet Web site and other venues.
- 4) Authorizes the CBSC and HCD to adopt regulations based upon the recommendations resulting from the working group for nonresidential occupancies. These regulations shall comply with the requirements of the Administrative Procedures Act.
- 5) Defines "functional recovery standard" as a set of enforceable building code provisions and regulations that provide specific design and construction requirements intended to result in a building for which postearthquake structural and nonstructural capacity are maintained or can be restored to support the basic intended functions of the building's preearthquake use and occupancy within a maximum acceptable time, where the maximum acceptable time might differ for various uses or occupancies.

EXISTING LAW:

- 1) Authorizes the CBSC to approve and adopt building standards. Every three years building standards rulemaking is undertaken to revise and update the California Building Standards Code (BSC). (Title 24 of the California Code of Regulations)
- 2) Directs HCD to propose the adoption, amendment, or repeal of building standards to the CBSC for all hotels, motels, lodging houses, apartment houses, and dwellings. (Health & Safety Code Section 17921)
- 3) Allows a governing body, city or county to make modifications to the BSC if they make express findings that such a modification or change is necessary because of local climatic, geological, or topographical conditions. (Health & Safety Code Section 17958.7)

FISCAL EFFECT: Unknown.

COMMENTS:

<u>Background:</u> The California Building Standards Law establishes the CBSC and the process for adopting state building standards. Statewide building standards are intended to provide uniformity in building across the state. State law specifies which departments are responsible for developing and proposing building standards. When there is no designated department then the CBSC is responsible. HCD is responsible for single family and multi-family dwellings.

There are a few exemptions, which allow a local governing body, city, or county to modify state building standards. A local governing body, city, or county can adopt an ordinance or a resolution in a public meeting that finds that a local building standard must be modified from the state building standard because of local climatic, geological or topographical conditions and file that ordinance with the CBSC. The CBSC reviews the findings of the ordinance to determine if the local governing body followed the correct procedure.

Need for the bill: According to the author, "[w]ith the exception of Essential Facilities, our current building code is designed to protect against loss of life, but the code says nothing about whether or when a building will be usable after a major earthquake. Even new buildings are expected to have significant repair costs and downtime after a major California earthquake. Essential facilities, such as hospitals and schools, are currently designed to remain usable. Analyses of large earthquakes anticipated in Southern California and the Bay Area predict that a significant number of structures built to the current code will suffer enough damage to be flagged as dangerous by local building departments. Together with expected damage to existing, older buildings, this represents more than \$100,000,000,000 in damage, displacement of people from their homes, and a significant disruption to the regional economy.

"The current approach to new buildings in California results in safe, but impaired—and in some cases, even disposable—buildings. Given the extreme housing crisis the state is facing, this is an approach we cannot afford. Ensuring that building codes require new buildings meet a functional recovery standard would mean people could enter buildings and resume normal activities soon after a large seismic event, instead of having buildings closed for months or years at a time. The advantages of higher standards include substantially smaller repair costs, substantial reduction in loss of use of buildings and the streets and buildings around them, and substantially quicker recovery for owners, tenants, neighborhoods, and whole cities. The National Institute of Building Sciences Natural Hazard Mitigation Saves: 2017 Interim Report states that new construction that exceeds current code would save approximately \$4 in avoided future losses for every \$1 spent on additional, up-front construction cost."

This bill would require the CBSC to convene a functional recovery working group to propose building standards for consideration by the CBSC during the next regularly scheduled Triennial Adoption Cycle occurring after January 1, 2020. Specifically, the CBSC would be required to assemble a working group comprised of various state entities and members of the construction, engineering, and insurance industries to investigate and determine criteria for a "functional recovery" standard, as defined, following a seismic event, for all or some building occupancy classifications. The working group would direct the CBSC and HCD to propose the appropriate building standards for consideration by the CBSC.

If new building standards are not in place by January 1, 2023, then CBSC and HCD are required to produce a document providing guidance to building owners and local jurisdictions regarding

functional recovery after a seismic event. The bill would authorize the CBSC and HCD to issue regulations based on the recommendations from the group for nonresidential occupancies.

The Committee may wish to consider amending the bill to authorize the working group to direct the CBSC, rather than both the CBSC and HCD, to propose the appropriate building standards for consideration during the next regularly scheduled Triennial Adoption Cycle occurring after January 1, 2020. As the CBSC, not HCD, has the authority to formally adopt building standards for new construction, and HCD does not have authority over nonresidential buildings, the Committee may wish to consider amending the bill to authorize only the CBSC to issue regulations based on recommendations from the group. Additionally, the Committee may wish to consider adding representatives from the Office of the State Fire Marshal and the Seismic Safety Commission to the working group, and deleting the International Code Council.

Arguments in support: Supporters view AB 1857 as an opportunity to evolve the California Building Code from a safety-based approach to a "functional recovery" approach, where safety is considered alongside the need for communities to recover in relatively short order. This broader objective would take into account the time needed before reoccupying a building, the cost and time of repairs, and cost and time to regain full building function. Supporters contend these enforceable building code provisions and regulations are an important step to improved seismic safety in California, and that providing these specific design and construction requirements will support California's broader disaster resilience and mitigation goals in the future.

<u>Arguments in opposition:</u> Opponents, including a coalition of building industry developers, owners, and architects, take issue with many of the provisions in the introduced version of this bill. Opponents note that recent amendments address many of these concerns, but a few policy issues remain. These include, in opponents' view, the questionable necessity of implementing higher structural standards statewide, requiring the working group to make the determination that mandatory building standards will be required, and requiring HCD and the CBSC follow the specific direction of the working group.

Committee amendments:

To better reflect the author's intent, the Committee may wish to consider the below amendments, which make the following changes:

- 1. Authorize the working group to direct the CBSC, rather than both the CBSC and HCD, to propose the appropriate building standards for consideration during the next regularly scheduled Triennial Adoption Cycle occurring after January 1, 2020.
- 2. Authorize only the CBSC to issue regulations based on recommendations from the group for nonresidential occupancies.
- 3. Add representatives from the Office of the State Fire Marshal and the Seismic Safety Commission to the working group, and delete the International Code Council.

The proposed committee amendments are as follows:

1. On page 2, in line 8, delete "The Structural Safety Department of the"

2. On page 2, in line 10, delete "The International Code Council" and replace it with:

Office of the State Fire Marshal

- 3. On page 2, in line 25, insert:
 - (15) Seismic Safety Commission
- 4. On page 3, starting in line 11, delete "and the Department of Housing and Community Development"
- 5. On page 3, in line 20, after "building owners," insert: engineers,
- 6. On page 3, in line 27, delete "and the department are" and insert:

is

REGISTERED SUPPORT / OPPOSITION:

Support

Dr. Lucy Jones Center for Science and Society Earthquake Engineering Research Institute Structural Engineers Association of California

Opposition

American Institute of Architects, California Council
Building Owners and Managers Association
California Apartment Association
California Building Industry Association
California Business Properties Association
International Council of Shopping Centers
NAIOP of California, the Commercial Real Estate Development Association

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